WHAT IS CLAIMED IS:

1. A system that evaluates body activity relative to an environment, said system comprising a processor that is associable with a sensor for sensing dynamic and static accelerative phenomena of said body, said processor operable to process said sensed dynamic and static accelerative phenomena as a function of at least one accelerative event characteristic and an environmental representation to thereby determine whether said evaluated body activity is within environmental tolerance.

2. The system set forth in Claim 1 wherein said sensed dynamic and static accelerative phenomena is relative to a three dimensional frame of reference in said environment, and said processor determines whether said body has experienced acceleration that represents one of a plurality of different types of motion.

3. The system set forth in Claim 1 wherein said processor determines that said evaluated body activity is relatively small to inactive as a function of said environmental representation.

4. The system set forth in Claim 3 wherein said evaluated body activity remains relatively small to inactive for a time period.

5. The system set forth in Claim 4 wherein said time period approaches a threshold and said processor is operable to generate a warning signal.

6. The system set forth in Claim 4 wherein said time period at least equals a threshold and said processor is operable to generate an alarm signal.

7. The system set forth in Claim 4 wherein said processor determines an increase in body activity and restarts said time period.

8. The system set forth in Claim 1 wherein said at least one accelerative event characteristic is representative mathematically of at least part of said environmental representation.

9. The system set forth in Claim 1 wherein said processor generates tolerance indicia in response to said determination.

10. The system set forth in Claim 9 wherein said processor controls indicating means in response to said generated tolerance indicia.

11. The system set forth in Claim 9 wherein said processor communicates said generated tolerance indicia to a monitoring controller.

12. The system set forth in Claim 11 wherein said processor communicates said tolerance indicia to said monitoring controller using at least one of a wired network and a wireless network.

13. The system set forth in Claim 12 wherein said processor communicates said tolerance indicia to said monitoring controller using the Internet.

14. The system set forth in Claim 11 wherein said monitoring controller generates statistics.

15. The system set forth in Claim 11 wherein said monitoring controller generates statistics and said processor modifies said environmental representation as a function of said generated statistics.

16. The system set forth in Claim 1 wherein said processor is associable with a power supply.

17. The system set forth in Claim 16 wherein said processor is operable to manage power supply consumption.

18. The system set forth in Claim 1 wherein said processor determines whether said evaluated body activity is within environmental tolerance independent of a starting attitude of said sensor.

19. The system set forth in Claim 1 wherein said body is an animal and wherein said processor monitors at least one physiological phenomena associated with said animal and generates signals in response thereto.

20. The system set forth in Claim 1 wherein said body is inorganic.

21. A method of operating a system to evaluate body activity relative an environment wherein a sensor is associated with said body, said method of operation comprising the step of processing, with a processor, repeatedly sensed dynamic and static accelerative phenomena of said body as a function of at least one accelerative event characteristic and an environmental representation to thereby determine whether said evaluated body activity is within environmental tolerance.

22. The method of operating a system to evaluate body activity relative an environment as set forth in Claim 21 wherein said sensed dynamic and static accelerative phenomena is relative to a three dimensional frame of reference in said environment, and said method further comprises the step of determining whether said body has experienced acceleration that represents one of a plurality of different types of motion.

23. The method of operating a system to evaluate body activity relative an environment as set forth in Claim 21 wherein said processor determines that said evaluated body activity is relatively small to inactive as a function of said environmental representation.

24. The method of operating a system to evaluate body activity relative an environment as set forth in Claim 23 wherein said evaluated body activity remains relatively small to inactive for a time period.

25. The method of operating a system to evaluate body activity relative an environment as set forth in Claim 24 wherein said time period approaches a threshold and said method further comprises the step of generating a warning signal.

26. The method of operating a system to evaluate body activity relative an environment as set forth in Claim 24 wherein said time period at least equals a threshold and said method further comprises the step of generating an alarm signal.

27. The method of operating a system to evaluate body activity relative an environment as set forth in Claim 24 wherein said processor determines an increase in body activity and said method further comprises the step of restarting said time period.

28. The method of operating a system to evaluate body activity relative an environment as set forth in Claim 21 wherein said at least one accelerative event characteristic is representative mathematically of at least part of said environmental representation.

29. The method of operating a system to evaluate body activity relative an environment as set forth in Claim 21 further comprising the step of generating tolerance indicia in response to said determination.

30. The method of operating a system to evaluate body activity relative an environment as set forth in Claim 29 further comprising the step of controlling indicating means in response to said generated tolerance indicia.

31. The method of operating a system to evaluate body activity relative an environment as set forth in Claim 29 further comprising the step of communicating said generated tolerance indicia to a monitoring controller.

32. The method of operating a system to evaluate body activity relative an environment as set forth in Claim 31 further comprising the step of communicating said tolerance indicia to said monitoring controller using at least one of a wired network and a wireless network.

33. The method of operating a system to evaluate body activity relative an environment as set forth in Claim 32 further comprising the step of communicating said tolerance indicia to said monitoring controller using the Internet.

34. The method of operating a system to evaluate body activity relative an environment as set forth in Claim 31 wherein said monitoring controller generates statistics.

35. The method of operating a system to evaluate body activity relative an environment as set forth in Claim 31 wherein said monitoring controller generates statistics and said method further comprises the step of modifying said environmental representation as a function of said generated statistics.

36. The method of operating a system to evaluate body activity relative an environment as set forth in Claim 21 wherein said processor is associable with a power supply.

37. The method of operating a system to evaluate body activity relative an environment as set forth in Claim 36 wherein said processor is operable to manage power supply consumption.

38. The method of operating a system to evaluate body activity relative an environment as set forth in Claim 21 wherein said processor determines whether said evaluated body activity is within environmental tolerance independent of a starting attitude of said sensor.

39. The method of operating a system to evaluate body activity relative an environment as set forth in Claim 21 wherein said body is an animal and wherein said method further comprises the steps of monitoring at least one physiological phenomena associated with said animal and generating signals in response thereto.

40. The method of operating a system to evaluate body activity relative an environment as set forth in Claim 21 wherein said body is inorganic.

41. A system that evaluates movement of a body relative to an environment, said system comprising:

a sensor, associable with said body, that senses accelerative phenomena of said body relative to a three dimensional frame of reference in said environment, said sensor comprising a plurality of acceleration measuring devices; and

a processor, associated with said sensor, that processes said sensed accelerative phenomena of said body as a function of at least one accelerative event characteristic to thereby determine whether said evaluated body movement is within an environmental tolerance, and to thereby determine whether said body has experienced dynamic acceleration due to external forces by subtracting a value of gravitational acceleration from the total acceleration experienced by said body.

42. The system set forth in Claim 41 wherein said at least one accelerative event characteristic is one of statically maintained and dynamically generated.

43. The system set forth in Claim 41 wherein said at least one accelerative event characteristic is representative mathematically of at least part of said environment.

44. The system set forth in Claim 41 wherein said processor generates tolerance indicia in response to said determination.

45. The system set forth in Claim 44 wherein said processor controls indicating means in response to said generated tolerance indicia.

46. The system set forth in Claim 44 wherein said processor communicates said tolerance indicia to a monitoring controller.

47. The system set forth in Claim 46 wherein said processor communicates said tolerance indicia to said monitoring controller using at least one of a wired network and a wireless network.

48. The system set forth in Claim 47 wherein said processor communicates said tolerance indicia to said monitoring controller using said Internet.

49. The system set forth in Claim 46 wherein said monitoring controller generates statistics.

50. The system set forth in Claim 41 wherein said processor determines whether said evaluated body movement is within tolerance by distinguishing between selected accelerative events and non-selected accelerative events.

51. The system set forth in Claim 41 further comprising a mount that associates said sensor with said body.

52. The system set forth in Claim 41 wherein said plurality of acceleration measuring devices of said sensor comprises a plurality of plural-axis sensors.

13. The system set forth in Claim 52 wherein each of said plurality of said acceleration measuring devices of said sensor is associable with said body so that each of said plurality of acceleration measuring devices of said sensor is aligned along one co-ordinate of a three dimensional co-ordinate system.

54. The system set forth in Claim 53 where said three dimensional co-ordinate system is a Cartesian co-ordinate system.

55. The system set forth in Claim 41 wherein said processor generates heartbeat indicia.

56. The system set forth in Claim 41 wherein said sensor and said processor are associated wirelessly.

57. The system set forth in Claim 41 wherein each acceleration monitoring device of said sensor is a single monolithic IC including a resiliently mounted sensor layer oriented in *x* and *y* axes.

58. The system set forth in Claim 41 wherein each acceleration monitoring device of said sensor comprises an accelerometer.

59. The system set forth in Claim 41 wherein said processor is associable with a power supply.

60. The system set forth in Claim 59 wherein said processor is operable to manage power supply consumption.

61. The system set forth in Claim 41 wherein said processor determines whether said evaluated body movement is within environmental tolerance independent of a starting attitude of said sensor.

62. A method of operating a system to evaluate movement of a body relative an environment wherein a sensor is associated with said body, said method of operation comprising the steps of:

processing, with a processor, repeatedly sensed accelerative phenomena of said body as a function of at least one accelerative event characteristic to thereby determine whether said evaluated body movement is within environmental tolerance; and

determining whether said body has experienced dynamic acceleration due to external forces by subtracting a value of gravitational acceleration from the total acceleration experienced by said body.

63. The method of operation set forth in Claim 62 further comprises the step of using said processor to at least one of:

(a) maintain statically said at least one accelerative event characteristic and generating dynamically said at least one accelerative event characteristic;

(b) determine whether said evaluated body movement is within tolerance by distinguishing between selected accelerative events and non-selected accelerative events;

(c) generate heartbeat indicia;

(d) manage power supply consumption.

64. The method of operation set forth in Claim 62 further comprises the step of using said processor to generate tolerance indicia in response to said determination.

65. The method of operation set forth in Claim 64 further comprises the step of using said processor to at least one of:

(a) control indicating means in response to said generated tolerance indicia;

(b) communicate said tolerance indicia to a monitoring controller using at least one of a wired network and a wireless network.

66. A method of operating a system to distinguish accelerative phenomena of a body comprising the steps of:

substantially continually measuring dynamic and static acceleration of said body in plural axes at a sensor maintained on the body and providing output signals indicative thereof;

processing said output signals to distinguish between normal accelerative events and abnormal accelerative events based upon both said dynamic and said static acceleration of said body; and

determining whether said body has experienced dynamic acceleration due to external forces by subtracting a value of gravitational acceleration from the total acceleration experienced by said body.

67. The method of claim 66 further comprising the step of setting a dynamic acceleration threshold and wherein said step of processing said output signals includes distinguishing dynamic acceleration of the body exceeding said threshold.

68. The method of claim 67 wherein said threshold is a dynamic acceleration intensity value.

69. The method of claim 66 wherein the step of processing said output signals includes determining a last stable static acceleration value corresponding to a last stable position of the body and comparing a later stable static acceleration value corresponding to a later stable position of the body to said last stable value.

70. The method of claim 66 further comprising the step of issuing an alert signal when a selected accelerative event is distinguished.

71. The method of claim 70 including the step of filtering said output signals to significantly reduce the probability of an alert signal due to single sharp impacts unrelated to said selected accelerative events.

72. The method of claim 66 further comprising the step of processing said output signals indicative of static acceleration of the body to determine when the body has laid down and thereafter processing said output signals indicative of dynamic acceleration to distinguish between selected accelerative events and non-selected accelerative events.

73. The method of claim 66 further comprising the step of setting a dynamic acceleration threshold and wherein said step of processing said output signals includes determining a last stable static acceleration value corresponding to a last stable position of the body, distinguishing dynamic acceleration of the body exceeding said threshold, and comparing to said last stable value a later stable static acceleration value corresponding to a later stable position of the body determined after a dynamic acceleration of the body in excess of said threshold is distinguished.